

ABSTRACT OF THE DISCLOSURE

An a.c. motor-inverter integrated drive unit comprises an a.c. motor powered by an alternating current. The motor includes a rotor rotatable about a rotation axis, a plurality of 5 stator cores arranged about the rotation axis at evenly spaced intervals to constitute a cylindrical stator structure, a plurality of stator coils disposed on the stator cores respectively and a plurality of cooling passages formed in the stator cores respectively. An inverter is combined with the motor. The 10 inverter converts a direct current to an alternating current and includes a plurality of power drivers which are arranged on the stator cores respectively. Wire members are used for connecting the power drivers and the stator coils respectively.